



AGRICULTURE, FOOD & NATURAL RESOURCES

Sample North Dakota Career Cluster Plan of Study

www.nd.gov/cte • www.careerclusters.org

Name _____
 School _____
 Date _____



SAMPLE OCCUPATIONS RELATING TO THIS CAREER CLUSTER	
Pathway	Occupations
FOOD PRODUCTS & PROCESSING SYSTEMS	Agriculture Sales Representative • Food Scientist • Butcher • Biochemist • Nutritionist Bacteriologist • Food Inspector • Produce Buyer
PLANT SYSTEMS	Geneticist • Soil/Water Specialist • Botanist • Agriculture Lender • Biological Technician • Commodity Marketing Specialist
ANIMAL SYSTEMS	Wildlife Biologist • Animal Nutritionist • Livestock Buyer • Agriculture Technician • Veterinary Assistant • Zoologist • Farmer/Rancher
POWER, STRUCTURAL & TECHNICAL SYSTEMS	Agriculture Equipment Operator • Electrical Engineering Technician • Parts Salesperson • GPS Technician • Communications Technician
NATURAL RESOURCES SYSTEMS	Cartographer • Range Manager • Ecologist • Fish & Game Officer • General Operations Manager • Commercial Fisherman
ENVIRONMENTAL SERVICE SYSTEMS	Pollution Prevention Technician • Hazardous Materials Handler • Water Quality Manager • Toxicologist • Recycler • Waste Technician
AGRIBUSINESS SYSTEMS	Sales Manager • Loan Officer • Ag Economist • Field Representative • Ag Chemical Dealer • Chemical Sales Representative • Ag Products Buyer

SUGGESTED COURSE OF HIGH SCHOOL STUDY						
It is suggested that students consider appropriate dual credit, articulation, or advanced placement opportunities for postsecondary credit.						
English (four units required to graduate)	Math (two units required to graduate)	Science (two units required to graduate)	Social Studies (three units required to graduate)	Physical Education (one unit required to graduate)	North Dakota Career & Technical Education and Other Electives (one unit of foreign or Native American language, fine arts, or career and technical education required to graduate)	Additional Suggested Learning Opportunities
<input type="checkbox"/> English I <input type="checkbox"/> English II <input type="checkbox"/> English III <input type="checkbox"/> English IV	<input type="checkbox"/> Algebra I <input type="checkbox"/> Geometry <input type="checkbox"/> Algebra II	<input type="checkbox"/> Physical Science <input type="checkbox"/> Biology <input type="checkbox"/> Chemistry <i>or</i> <input type="checkbox"/> Advanced Biology	<input type="checkbox"/> World History <input type="checkbox"/> U.S. History <input type="checkbox"/> Government <input type="checkbox"/> Economics	<input type="checkbox"/> Physical Education <input type="checkbox"/> Health	<input type="checkbox"/> Introduction to Agriculture <input type="checkbox"/> Foundations of Agriculture <input type="checkbox"/> Agriscience Technology I, II, III, or IV <input type="checkbox"/> Agriculture Sales & Service <input type="checkbox"/> Agricultural Business Management <input type="checkbox"/> Agricultural Mechanics I, II, III, or IV <input type="checkbox"/> Botany/Horticulture Science I or II <input type="checkbox"/> Natural/Environmental Resources <input type="checkbox"/> Agricultural Processing <input type="checkbox"/> World Agricultural Science & Tech. <input type="checkbox"/> Agriculture III or IV <input type="checkbox"/> Individual Agricultural Studies <input type="checkbox"/> Community Development <input type="checkbox"/> Supervised Agricultural Experience	School-Based: <input type="checkbox"/> FFA <input type="checkbox"/> Career Research <input type="checkbox"/> Cooperative Education <input type="checkbox"/> Internship <input type="checkbox"/> Job Shadowing <input type="checkbox"/> Service Learning Project Community-Based: <input type="checkbox"/> Mentorship <input type="checkbox"/> Volunteer <input type="checkbox"/> Part-time Employment

SAMPLE NORTH DAKOTA POSTSECONDARY PROGRAMS RELATED TO THIS CAREER CLUSTER			
Pathway	Associate Degree or Less	Bachelors Degree	Masters Degree or More
FOOD PRODUCTS & PROCESSING SYSTEMS		<input type="checkbox"/> Ag Food Safety	<input type="checkbox"/> Ag Food Safety <input type="checkbox"/> Cereal Science
PLANT SYSTEMS	<input type="checkbox"/> Agronomy Technician <input type="checkbox"/> Crop & Weed Science <input type="checkbox"/> Turf Management	<input type="checkbox"/> Turf Management <input type="checkbox"/> Crop & Weed Science <input type="checkbox"/> Soil Science	<input type="checkbox"/> Plant Pathology <input type="checkbox"/> Entomology <input type="checkbox"/> Horticulture
ANIMAL SYSTEMS	<input type="checkbox"/> Equine Studies <input type="checkbox"/> Animal & Range Sciences	<input type="checkbox"/> Equine Studies <input type="checkbox"/> Animal & Range Sciences	<input type="checkbox"/> Animal & Range Sciences <input type="checkbox"/> Zoology
POWER, STRUCTURAL & TECHNICAL SYSTEMS	<input type="checkbox"/> Power Plant Technology <input type="checkbox"/> Process Plant Technology		
NATURAL RESOURCES SYSTEMS	<input type="checkbox"/> Water Quality Technology <input type="checkbox"/> Biology/Fisheries & Wildlife	<input type="checkbox"/> Wildlife, Fisheries, Tech, Sci <input type="checkbox"/> Biology/Fisheries & Wildlife	<input type="checkbox"/> Natural Resource Mgt
ENVIRONMENTAL SERVICE SYSTEMS	<input type="checkbox"/> Environmental & Conservation Science <input type="checkbox"/> Environ Tech/Global Info Systems	<input type="checkbox"/> Environmental Geosciences	<input type="checkbox"/> Environmental & Conservation Science <input type="checkbox"/> Environmental Engineering
AGRIBUSINESS SYSTEMS	<input type="checkbox"/> Ag Production/Farm/Ranch Management <input type="checkbox"/> Ag Sales & Service <input type="checkbox"/> Ag Business & Management	<input type="checkbox"/> Ag Sales & Service <input type="checkbox"/> Ag Business & Management	<input type="checkbox"/> International Agribusiness